Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1-24. (Cancelled)

25. (Withdrawn) An antagonist of Rho family members or Rho activity, wherein the antagonist is able to overcome growth inhibition in the central or the peripheral nervous system and thereby foster regeneration of damaged or injured axons.

26. (Withdrawn) The antagonist as in claim 25, wherein said Rho family members are selected from the group consisting of Rho, Rac, cdc42, and Rho-associated protein kinase.

27. (Withdrawn) The antagonist as in claim 25, wherein said Rho activity is with the Rho kinase or with the regulatory pathway via interaction with GTP/GDP cycle.

28. (Withdrawn) The antagonist as in claim 25, wherein the interaction with the GTP/GDP cycle is selected from the group consisting of a GTP/GDP exchange proteins (GEP), a GDP dissociation inhibitor (GDI), and GTPase activating protein (GAP), the interaction serving to regulate Rho activity.

29. (Withdrawn) A method of identifying an antagonist of a Rho family member that suppresses neuron growth, the method comprising the steps of:

(a) culturing neurons on a growth permissive substrate that incorporates a growth-inhibiting amount of the Rho family member; and

(b) exposing the cultured neurons of step (a) to a candidate Rho family member antagonist in an amount and for a period sufficient prospectively to permit growth of the neurons,

wherein a candidate Rho family member antagonist which elicits neurite outgrowth from the cultured neurons of step (a) is identified as a Rho antagonist.

30-34. (Cancelled)

35. – 42. (Cancelled)

43. (Previously presented) The method of claim 45, wherein the antagonist is delivered with a pharmaceutical carrier or delivery system.

44. (Cancelled)

45. (Previously presented) A method to increase neurite regeneration in the CNS in a patient with a traumatic spinal cord lesion following spinal cord damage, the method comprising

delivering to a nerve growth environment by infusion into a site of surgery for said spinal cord lesion, a Rho family antagonist in an amount effective to suppress inhibition of neuronal axon growth,

which antagonist ribosylates Rho protein family members to inactivate said Rho family members, and

which antagonist, when scrape loaded into PC12 cells *in vitro*, produces outgrowth of PC12 cell neurites, said PC12 cells being plated on a growth inhibitory substrate selected from the group consisting of myelin and myelin-associated glycoprotein substrate,

said antagonist being a C3 ADP-ribosyl transferase.

46. (Previously presented) A method to increase neurite regeneration in the CNS in a patient with a traumatic spinal cord lesion following spinal cord damage, the method comprising

delivering to a nerve growth environment by infusion into a site of surgery for said spinal cord lesion, a Rho family antagonist in an amount effective to suppress inhibition of neuronal axon growth,

which antagonist ribosylates Rho protein family members to inactivate said Rho family members, and

which antagonist, when scrape loaded into PC12 cells *in vitro*, produces outgrowth of PC12 cell neurites, said PC12 cells being plated on a growth inhibitory substrate selected from the group consisting of myelin and myelin-associated glycoprotein substrate,

said antagonist being a Rho family-inhibitory fragment of C3 ADP-ribosyl transferase.

47. (Previously presented) The method of claim 46, wherein the antagonist is delivered with a pharmaceutical carrier or delivery system.